

Psychometric assessment of the Clock Drawing Test (CDT)

This is an excerpt from the full technical report, which is written in Norwegian.

The excerpt provides the report's main messages in English

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Psychometric assessment

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We would like to thank all contributors for their expertise in this project. Norwegian Knowledge Centre for the Health Services assumes final responsibility for the content of this report.

Norwegian Knowledge Centre for the Health Services
Oslo, June 2015

Main findings

The Norwegian Knowledge Centre for the Health Services is commissioned by the Norwegian Directorate of Health to undertake a review and assessment of research on psychometric properties of psychiatric measures used in Norway. In this report we were commissioned to identify research on the psychometric properties of the Clock Drawing Test (CDT) and provide an assessment of the test.

Description of Clock Drawing Test

The Clock Drawing Test is a visual (non-verbal) screening instrument for measuring mild to moderate cognitive impairment. The Test has been in use since the 1950's. The first published standardized scoring version was by Freedman and Kaplan in 1994. The Norwegian version is by Strobel et.al. (2012). Design and task instruction of the Clock drawing test varies somewhat according to the scoring system used. The most common is that the test person is instructed to draw a round clock circle with two clock arms facing towards a given time point. The time used is between 2 and 10 minutes. No special skills are required to administer the test.

Methods

We conducted a systematic literature search and searched for newer systematic reviews (published after 2005). We also searched for Norwegian sample studies. The search was conducted in September 2014. Two researchers have identified publications according to inclusion criteria and extracted relevant psychometric data from full text. Alle authors have contributed to writing the report under supervision by the last author.

Results

We included three systematic reviews. When screening for possible dementia, test sensitivity is reported from 67% to 98% and spesifisity from 69% to 95%, and correlation to the Mini Mental State Examination 0,79. Relevant Norwegian population studies were not identified, but a Norwegian test version named KT-NR2 was found.

Conclusion

The Clock Drawing Test has generally adequate psychometric properties as a screening instrument for mild to moderate cognitive impairment. The Clock Drawing Test encompasses only some of the aspects of cognitive functioning.

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Type of publication:

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Review and assessment of research on psychometric properties of psychiatric measures used in Norway. Evaluation of norm data, reliability and validity of the Clock Drawing Test (CDT)

Limitations:

- No critical evaluation of study quality
- No health economic evaluation

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